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MEDICAL.

For the MEDICAL AND AGRICULTURAL REGISTER.

DR. ADAMS,

IF you think the following caſe comes within the ſcope of your *infant* publication, and worthy of inſertion, you will give it a place, and oblige, perhaps, ſome of your readers.

IATROS.

Caſe.

ABOUT 2 o'clock, P. M. on the 30th. of May, 1805, Miſs *P*—— *R*—— chewed, out of curioſity, a little of the freſh root of Wake-robbin,* and incautiouſly ſwallowed a ſmall quantity of it. In a few minutes ſhe complained of a burning ſenſation in her mouth and throat, and of great diſtreſs at her ſtomach; which was ſoon ſucceeded with a nauſea, and frothing at her mouth: then came on ſpaſmodic contractions of the muſcles and tendons of the hands and arms, accompanied with paleneſs and coldneſs of theſe parts: pretty ſoon afterwards, the ſpaſms alſo ſeized her lower extremities, ſo that ſhe could not walk, even with aſſiſtance; and the ſurface of her body became univerſally of a purple color: at length her ſpeech was depraved, ſo that ſhe was unable to talk plainly: finally, ſpaſms with pain, ſeized the erector muſcles of the neck and back, and bent her backward in the manner of that variety of locked-jaw, known among phyſicians by the term Opiſthotonos. She ſtill appeared to poſſeſs

* "Cuckowpint. Dragon-root. Wake-robbin. Lords and Ladies."—Mem. Am. Acad. vol. I. p. 487. Sometimes alſo called Swamp-turnip, I believe.—Arum, Pharm. Lond. and Ed.

her intellectual faculties, but could not ſpeak. By this time, a doſe of the emetic tartar [a puke] was procured and given her; (the family phyſician being abſent from home.) For the ſpace of an hour after taking the emetic, and before it began to operate, the ſpaſms remitted, but did not go off till an hour or more after it had done operating. She brought up nothing but the contents of her ſtomach, which were her dinner, lately eaten, together with the ſmall quantity of the Wake-robbin root which ſhe had ſwallowed. She continued to feel, occaſionally, ſome degree of the ſpaſms and pain, with nauſea, through the afternoon: ſhe had an uneaſy night; and the nauſea recurred on the two or three following days, but was felt moſt conſiderably in the mornings. She gradually recovered her uſual ſtate of health.

The young lady, the ſubject of this caſe, is aged 18 years; has black hair and eyes, and a ſmooth ſkin; is of a ſlender conſtitution, but commonly healthy. No cauſe could be aſſigned for the diſturbances excited in her ſyſtem, except the Wake-robbin root; nor as contributing to their aggravation, except her dinner; for ſhe was in ordinary health before taking the root: it is preſumed, however, that the effects of it on her ſyſtem, were ſomewhat ſingular and peculiar to her; for it is hardly credible, I think, that ſo ſmall a quantity as ſhe believed ſhe ſwallowed, could produce ſuch alarming ſymptoms in every perſon.

The pungent and inflammatory acrimony of freſh Wake-robbin root, is well known to moſt country people, and to phyſicians. The latter, probably, are generally acquainted with its uſefulneſs in the cure of certain diſeaſes; and a caution is ſuggeſted to the former, from the recital of the foregoing caſe, to be very careful in uſing it themſelves, or in adminiſtering it to others who are ignorant of its terrible power, either with a view to impoſe on them, or obviate their ailments.

*D**********s, March*, 1806.

An Account of Reſuſcitation in a Caſe of ſuppoſed Death from Yellow Fever. In a Letter from Dr. RUSH, [*of Philadelphia,*] *to Dr.* COXE.

[From the Medical Muſeum.]

SIR,

IN the month of Auguſt, of the year 1798, the yellow fever appeared in Marcus Hook, a ſmall village ſituated on the banks of the river Delaware. The crews of the United

States' veſſels Ganges and Retaliation, which lay along ſide of the village, were at the ſame time attacked with the diſeaſe. Upon the firſt indiſpoſition, each perſon was removed from the veſſels and conveyed to tents fitted up for his reception, on an elevated and healthy ſpot of ground in the neighborhood; where, through the humane attentions of the commander, he was provided with every neceſſary that his ſituation required.

Out of ſixty ſeamen, ordinary ſeamen, and mariners, who had been ſent to the tents, many had the diſeaſe mildly, ſome ſuffered ſeverely, and four died, on the third, fifth, and ſeventh days, with black vomiting, and other ſymptoms of great malignity. Of the whole number, I have ſelected a caſe, which, from the rareneſs of its occurrence, may be intereſting and important.

The particular ſymptoms which marked the progreſs of the diſeaſe in this caſe, from the apparent ceſſation of life, to its complete reſuſcitation, I am unable to ſtate, owing to the circumſtance of the daily journal remaining in the poſſeſſion of my aſſiſtant, Mr. Parker, after he had retired from the United States' ſervice. What I obſerved at the time of my viſits, which through neceſſity were ſhort and few, I have correctly ſtated, and have no reaſon for doubting the truth of what is farther advanced, from the repreſentation of Mr. Parker.

Caſe.

James Clark, an ordinary ſeaman belonging to the Ganges, about nineteen years of age, and of a hale conſtitution, was attacked on the ſeventh of September, with the yellow fever. The ſymptoms were ſuch as characterize the malignant forms of this diſeaſe. The force of the diſeaſe ſeemed principally exerted on the arterial ſyſtems, while the muſcular and nervous ſyſtems, appeared to be but ſecondarily affected. The pulſe was depreſſed at the commencement of the attack, but roſe afterwards and became full and ſtrong. Twenty-four ounces of blood, in all, were taken from his arm in the firſt paroxyſm; during which he was copiouſly purged with ſtrong doſes of calomel. On the ſecond day, bleeding and purging were diſcontinued, and mercurial frictions, together with ſmall and repeated doſes of calomel were preſcribed in order to produce a ſalivation. This however could not be effected. The diſeaſe, notwithſtanding a variety of ſtimulants, ſuch as brandy, ether, and laudanum, arrived at the laſt ſtage, when on the morning of the fourth day, the black vomiting began,

and continued till twelve o'clock at noon; at which time it was ſaid, he had expired. Upon paying my ſecond viſit to the tents, at four o'clock in the afternoon of the ſame day, I ſaw the body of Clark lying in a coffin, and apparently lifeleſs. On cloſely examining it, I obſerved the pale yellow, that previouſly tinged the temples, nails, and neck, changed to an orange-like hue, and interſperſed with purpliſh ſpots, reſembling petechiæ. Neither pulſe or heat were perceptible, nor was reſpiration diſcoverable on the mirror, which was held before the mouth. Putrefaction, however, had not taken place; the lower jaw was ſtill flexible, and upon a more minute examination, I felt (or thought I felt) a ſlight warmth about the epigaſtric region. ——— With ſuch ſlender and evaneſcent ſymptoms of life, experiment indeed promiſed little. But ſomething I was reſolved to attempt; I therefore ordered the body to be covered with warm aſhes from the cook's fire, and a gill of very ſtrong brandy tody to be poured down the throat every half hour. Being called away, I could not wait to ſee the effect of theſe remedies; but requeſted Mr. Parker to continue the uſe of them, whilſt any hope remained of their being ſucceſsful. On my return, at ſunriſe, the following morning, I had the pleaſure of finding Clark propped up, indulging himſelf with ſoup. From Mr. Parker I learned, that about eight o'clock, after he had received a quart of brandy, he began to reſpire; that the brandy was continued, in the ſame proportion which I had preſcribed, until eleven o'clock, when he was ſo far recovered as to complain of the warmth of the aſhes; that he was then taken out of the coffin, and laid on ſtraw on the ground. Port wine ſangree was then ſubſtituted for brandy, and was regularly adminiſtered till day light, when he refuſed to take any more, and called for food.

On the treatment of the above caſe, it may be proper to remark, that, had convulſions or ſpaſms attended the apparent diſſolution, I ſhould have heſitated in pouring a fluid down the throat; as when death occurs in convulſions, the glottis [opening of the windpipe] might not be completely cloſed, while the muſcles of the epiglottis [the cover of the opening of the windpipe] partaking alſo of the general convulſion, might retain it in an erect poſition: hence a fluid would paſs into the lungs, as well as into the ſtomach; a circumſtance which would prevent reſuſcitation. But in caſes like Clark's, where muſcular relaxation accompanied the apparent extinction of life, the epiglottis muſt neceſſarily be in contact with the glottis, and thereby prevent the admiſſion of a fluid into the lungs.

If the hiſtory of the above caſe ſhould ſerve to prevent premature interment, and lead to the uſe of remedies for reſuſcitation, in doubtful caſes of death from fever, as well from cauſes which induce it ſuddenly, it will be a high gratification to

Your Friend,

JOHN RUSH.

Philadelphia, Auguſt 17, 1804.

Blood Root, its Efficacy in Jaundice, &c. *By* JAMES MEASE, M. D.

[From the Philadelphia Medical Muſeum.]

SANGUINARIA Canadenſis, or blood root, red root, is a very common plant in our woods. An inaugural experimental diſſertation on it was written by Dr. Downey, of the univerſity of Pennſylvania, in the ſpring of 1803. Among the virtues aſcribed to it in that diſſertation, one is unnoticed, which probably renders this plant of more value than any of its other virtues. I allude to its efficacy in removing jaundice. Shoeps barely mentions its uſe in that complaint; but my authority for its utility therein, is Thomas Cooper, Eſq. of Northumberland, who, in a letter which I lately received from him, mentions, that Dr. Smith, of Wilkeſbarre, in Luzerne county, has for ſome years paſt uſed the powdered root, with great ſucceſs, in doſes of fifteen or twenty grains; and further obſerves, that it is a chief ingredient in the quack medicine, known by the name of *Rawſon's bitters*.

AGRICULTURAL.

For the MEDICAL AND AGRICULTURAL REGISTER.

Obſervations on Orchards, with Directions for Planting and Pruning Fruit Trees.

THERE is ſcarcely any part of a farm that is eſteemed ſo uſeful and valuable as the *orchard*. Yet, perhaps, it is that which is the moſt neglected. If you count the number of apple trees on a farm, or even in a whole townſhip, probably not one tree in ten will be found to pay, by its fruit, for the ground it occupies; either becauſe it bears little fruit, or what it bears is bad, or ripens out of ſeaſon, or is dropped in

the paſture, where the cows are greatly injured in their milk, by eating the wind-falls. A ſingle tree has been known to produce in one year, apples enough for ſix or ſeven barrels of cider; while there are many ſcores of dwarfiſh trees in bad condition, ſlowly decaying, with deep mortal wounds, and on a barren ſoil, that afford leſs fruit in twenty years.

It would be a great public benefit if your Regiſter ſhould rouſe the attention of farmers to a better ſyſtem of treatment of their apple trees. The want of rules and directions is not half ſo much to be lamented as the general want of care. Indeed ſo little foreſight and judgment appear in many inſtances of planting orchards, one would ſuppoſe the riſk was conſidered as falling on the *trees*, not on the *owner*. He ſeems to ſay, grow or die, and yet he manages the matter ſo unaccountably that they can do neither for the firſt eight or ten years.

Young trees are choſen from a nurſery, rank and tender as weeds with the forcing power of hoeing and manure. They are twiſted and torn out of the ground, and the mangled roots are crowded into a ſmall hole of the depth and dimenſions of a peck meaſure. The tree, pent up as it were in an iron pot, either dies in the ſummer, or the efforts nature makes to break out by the roots from the hard little circle in which they are confined, are made in vain. Theſe efforts are renewed, and again in vain, the next ſummer. Thus the tree is dwarfed, every ſcratch on the bark cankers and ſpreads a rot to the heart, and in ſeven years it has ſcarcely made any advances. The life of ſuch a tree muſt be ſhort, ſickly, and barren.

It is recommended to prepare the ground for an orchard with diligence before the trees are planted. Dig holes as large as the ſmall wheel of a waggon, at leaſt a year before you ſet the trees. Throw the top of the earth into a heap by itſelf; with a ſpade and ſmall iron bar looſen the ſoil eighteen inches deep, and throw out this under bed of earth into another heap. The ground thus expoſed ſo wide and deep to the ſun, rain and froſt, and the wider and deeper the better, will mellow and ſweeten. In the ſpring, ſay in April, chooſe young natural or ungrafted trees from a nurſery, that are free from wounds on the bark. Carefully take them up with their whole ſpread of roots. Half the trees uſually get their death wound in taking up. In planting them out, firſt prune away broken and diſeaſed roots, and ſuch as croſs each other, and then draw round them into the hole the top of the ground that was laid in the pile the year before; it will be mellow and rotten. After this throw in the other heap.

So large and wide a hole will afford a ſpace for the roots to ſpread as good as tilled land. Before the weather becomes

very dry, a fork-full of old hay ſhould be flung on to the dug circle in which the tree ſtands: this will prevent the trees periſhing in July and Auguſt with drought. Carefully remove this hay in November that the field mice may not find a harbor to gnaw and ſpoil the tree in the winter. The hay ſhould be replaced or more brought the ſecond ſummer, after which the tree having filled up with its roots the wide circle in which it was planted, will begin to break out of it into the harder earth.

Now, if your tree is healthy and flouriſhing, you may graft it, and this operation will augment the vigor of its growth. Care muſt be taken to form the head of the tree; by removing the twigs that it is foreſeen will interfere, a ſpreading ſhape may be given to the top, and the tree will have little future occaſion for pruning.

But as this early care may not happen to be beſtowed, or may not be ſkilfully applied, almoſt every ſpring will call for a ſparing uſe of the pruning knife. Pruning ſhould be done in the ſpring after the winter has really diſappeared, and the weather become ſoft. But it ſhould by no means be delayed till the month of May: for after the flow of the ſap is great, the bark at the lips of the wound is apt to peal or gape open; and as far as the bark peals, the wound will ſpread. You ſhould prune off the limbs cloſe to the place of their inſertion into a larger limb, leaving no ſtump. If after this, the bark ſhould be raiſed up by the air half an inch from the place where you cut, a very deep and almoſt fatal wound will be left. There is reaſon to believe that the bark will often adhere cloſely to the wood when you prune, but ſome days afterwards the air or the flow of the ſap will cauſe the bark to riſe. On theſe accounts it ſeems prudent to prune rather early in April, ſo that the wound may dry and harden before the bark inclines to peal or ſeparate from the wood.

If wounds are made at this ſeaſon very ſmoothly, and the limbs cut off are ſmall, nature will ſoon cauſe the new bark to ſpread over the wounded place. No harm is likely to enſue unleſs the naked wood rots before the bark ſpreads over it. If the limb cut off be large, this rot will take place; and rely upon it every great wound is a great diſeaſe. It is better to cut of two, three, or ten ſmall limbs, than one very large one. When this cannot be avoided, make the cuts ſloping ſo that the water may run off.

Much has been ſaid of Forſyth's compoſition. It deſerves commendation. No doubt can be entertained that trees ſcarcely feel any injury from pretty ſevere prunings, if the air be ſhut out from the naked wood. But there ſeems to be no

reaſon to hold his recommendation of his compoſition as uſeful to nouriſh or ſtimulate the conſtitution of the trees to be any thing better than quackery. Common clay on a wound with a piece of bladder bound on with yarn to keep it from cracking or waſhing off, would anſwer every purpoſe of his compoſition, becauſe it would keep the air out. Clay mortar worked with cattle's hair, which is a good mixture for grafting, would do for covering wounds, and to fill up the hollows and rotten places in the trunks of trees; if rags or even paper can be ſecured upon the ſurface over the clay to keep off the violence of the rain, it would anſwer.

Nor does it ſeem clear that the removal of every particle of the cankered wood, as Forſyth directs, is neceſſary to the cure of a diſeaſed tree. Fill it up with clay mortar mixed with hair, and exclude the air and water, the fermentation muſt of courſe ceaſe, and nature, relieved from her malady, will haſten to renew the branches of the tree. Stop the rot and you ſtop the diſeaſe.

There ſeems alſo to be good reaſon to queſtion whether Forſyth has been able to renew the wood of a tree where nothing remained ſound but bark: yet this is what he pretends to have done.

☞ On the whole, to have flouriſhing orchards, chooſe good land, and keep it in good heart without ploughing. Prevent wounds on your trees, but when they happen prevent the air and wet from all communication with them.

Further Extracts from a Paper publiſhed by the Maſſachuſetts Agricultural Society, on Gypſum, or Plaſter of Paris. By a Member of the Kennebec Agricultural Society.

"THE *manner* in which plaſter produces its good effects, when employed in agriculture, appears never to have been made the object of minute ſcientific examination. Farmers have commonly gueſſed concerning it, and philoſophers on the whole, have done little better. * * * * * *

One circumſtance is learned from chemiſts, namely, that plaſter quickens the *progreſs of putrefaction* more than time; and this ſingly is of conſiderable moment. If plaſter haſtens the diſſolution of animal and vegetable ſubſtances when deprived of life, it of courſe prepares their particles for immediately entering into a new form, as vegetables; and thus contributes to the great circulation of matter, which prevails throughout organized nature. There ſeems alſo to be ſome peculiar connexion between plaſter of Paris and *moiſture*, when

the plaſter is brought into a ſtate *to act as manure*; for it is ſaid, that garden beds ſtrewed with it are kept light and mellow, and free from baking and dryneſs; and that plants acted upon by it, exhibit the dews longer and more plentifully in conſequence of it. The dryneſs of the air in the chief part of the United States, makes this a valuable quality to the American farmer.

Plaſter is now commonly firſt pounded and then *ground*, ſo as to meaſure from 20 to 25 buſhels by the ton; but it is ſaid to be beſt when a buſhel weighs a long hundred, making 20 buſhels to the ton.

Plaſter is commonly uſed upon different *plans*, varying according to its objects. If deſigned to laſt for a *term of years*, it is ſtrewed (in the United States) in the ſhape of powder, at the rate of 3, 4, 5, and even 6 buſhels to the acre. But the preſent opinion of ſome American farmers, who have much experience in it, ſeems in favor of an *annual* application, wherever it is proper to uſe it at all. The yearly quantity is in general little leſs than a buſhel to the acre; though ſome, for a time, put conſiderably more; and an extra quantity is commonly adviſable in the firſt year.

If it be wiſhed to give a ſpur to the growth of *ſeed*, the ſeed is to be wetted and rolled in plaſter; and when thus coated, it is to be ſown in the uſual manner. For *Indian* corn, not only this coating with plaſter is proper, but a table-ſpoonful of plaſter is afterwards to be ſtrewed upon each hill or bank, when firſt hoed; and ſome add a ſecond ſpoonful over the ſecond hoeing; though the neceſſity of this laſt operation is doubted by others. In the caſe of *grain* and *graſs ſeed*, ſown together, ſome not only wet and coat the ſeed, but ſtrew more plaſter upon it, when firſt ſcattered upon the field; and then cover the whole with the harrow or plough. Others coat the ſeed, but wait till the crop appears above ground, before they give the top-dreſſing with plaſter. And this ſeems the moſt prudent method; for by ſtrewing the plaſter too early, ſome *weeds* may be favored; whereas the plaſter ought to be applied as excluſively as poſſible to the *crop*. Thoſe who ſow their grain in the *autumn by itſelf*, and add clover afterwards during the winter, by ſowing it upon the ſnow, may coat the ſeeds in each caſe with plaſter; and when the ground ſettles and dries in the ſpring, they may ſcatter plaſter over the whole.

As to the *time of the year* for applying plaſter,—ſome ſcatter it whenever the graſs is bitten very cloſe, or elſe immediately after cloſe mowing, provided cattle are not to follow; others do it juſt before the commencement of winter; others throw it upon the ſnow; and others ſow it immediately when the

ground becomes dry, after the departure of the ſnow—avoiding frozen ground, becauſe it might there be blown away, ſhould the field be ſmall, or in any event be driven into heaps. Some divide the doſe for graſs, putting on one half before vegetation begins in the ſpring, and the other half when the graſs has ſtarted. It ſeems on the whole reaſonable to ſuppoſe, that the plaſter ought not to be ſtrewed before it can be of uſe; leſt among other reaſons, it ſhould diſſolve and be waſhed from the ſoil, or leſt the mixture made from it ſhould ſink too deep into the earth, or leſt its virtues ſhould in any other manner be prematurely diſſipated. Plaſter in general (as has been mentioned) ſhould be applied to *ſeed* at all ſeaſons; eſpecially if the ſeed be ſown late in the period appropriated for it. It ſhould be put upon *crops* while in their infant ſtate; eſpecially with a view to ſecure the early ſhooting of the fibres, particularly in the ſpring, and in countries which are hot or dry. As to winter grain, indeed, it is probable that plaſter will be of little ſervice to it till the ſpring opens, unleſs applied to the ſeed, or unleſs the crop be backward. Experiments, however, muſt decide many of theſe caſes; and what has been ſaid, will in general ſhew where to employ theſe experiments.

With reſpect to the *ſoils and ſituations* ſuited for plaſter,—it is clear that plaſter may be thrown away upon wet ſoils and wet climates: it agrees, however, in general, with dry loams and hungry ſoils; it is favorable to hilly land, where the water cannot lodge;* and it checks the baking of clays: it is commonly ſuppoſed to be uſeleſs near the ſea. As the ſea winds are uſually moiſt, cool, and ſalt, we ſhall not wonder, where theſe prevail, that a manure, favoring moiſture and proſpering with heat, and containing ſome principles analagous in a certain degree with thoſe of ſea ſalt, ſhould find little room for exerciſing its virtues. It may, however, happen in a great continent, where dry winds and a dry atmoſphere occur, that plaſter ſhall furniſh inſtances of its ſucceſs, even near the ſea; of which I have heard examples in New Hampſhire and the diſtrict of Maine. Climates which are moiſt, and deficient in ſummer heat, (as Great Britain and Ireland) are not among thoſe where plaſter has had the moſt numerous advocates: nevertheleſs, in the ſouthern parts of England, ſituations are found where plaſter meets the moſt flattering ſucceſs. On the other hand, the dryneſs, the heat, and the clear and long continued ſunſhine of the American climate, during ſummer, promiſe commonly, a favorable opportunity for the action of

* The farms of general WASHINGTON, being ſtiff, cold, and moſtly clayey, received no benefit from plaſter, though tried in various manners: yet the general "believed in, and was friendly to gypſum as a manure."

plaſter; provided no accidental moiſt air interferes, whether ariſing from the ſea, the great lakes of the interior, or extenſive marſhes or inundations; and provided the ſoils and the objects of the culture be adapted to it. In general we may preſume, that *heat* has a material influence in the proceſs by which plaſter renders ſervice to vegetation; becauſe heat has a great effect in promoting chemical ſolutions and decompoſitions; eſpecially in conjunction with moiſture, with which plaſter forms ſome ſecret alliance.

The *objects* to which plaſter has hitherto moſt frequently been applied, are graſſes, alſo grain, at leaſt ſpring grain, Indian corn, flax, buckwheat, pulſe, and young fruit trees. To none of the kinds of graſs, however, has plaſter ſeemed better ſuited, than to red clover; red clover being fond of a dry loam, to which plaſter is itſelf particularly ſuited.

It has been aſſerted, that plaſter is *capricious in its effects*: this complaint is natural, when ſo little is known of the cauſes which make the plaſter to ſucceed or fail. The farmer, however, ſhould recollect, that his diſappointment, if it occurs, may be owing to the uſe of plaſter, either in improper quantities or at improper ſeaſons, or for improper ſoils or improper objects; and that the employment of it may require to be for a time ſuſpended. The plaſter alſo may not be of a perfect quality, either from ſome original defect, or perhaps from having been kept too wet. Much alſo may depend upon the weather which follows the uſe of it. Plaſter in general, to uſe the phraſe of the Pennſylvanian farmer, *requires ſomething to feed upon*; (as rotten leaves and roots, and certain manures;) without which, its powers for a time, in a manner ſtand ſtill.

MISCELLANEOUS ARTICLES.

ARTICLE VII.

An expeditious Method of deſtroying Rats.

FOR the diſcovery of the following *coniplete* remedy, we are indebted to G. W. MILLER, an ingenious apothecary of Wernigerode, in Germany; he candidly acknowledges to have derived the firſt hint for ſuch a purpoſe, many years ſince, from a book written by a celebrated economiſt; in ſhort it will be found the moſt expeditious and effectual mode that can be purſued. A capacious caſk [covered at top] of moderate height muſt previouſly be procured, and put in the vicinity

of places infeſted with rats. During the firſt week this veſſel is employed only to allure the rats to viſit the top of the caſk, by means of boards or planks arranged in a ſloping direction to the floor [or bottom of the cellar,] which are every day ſtrewed with oat-meal, or any other food equally grateful to their palate; and the principal part of which is expoſed on the ſurface. After having thus been lulled into ſecurity, and accuſtomed to find a regular ſupply for their meals, a ſkin of parchment [or ſheep-ſkin] is ſubſtituted for the wooden top or cover of the caſk, having been previouſly cut, with tranſverſe inciſions, [thus +] for ſeveral inches through the centre of the ſkin, ſo as to yield at the ſlighteſt preſſure. At the ſame time, a few gallons of water, to the depth of five or ſix inches, are poured into the empty caſk. In the middle of this element, a brick or ſtone is placed, ſo as to project one or two inches above the water; and that one rat may find on the former, a place of refuge. Theſe preparatory meaſures being taken, the boards as well as the top of the caſk ſhould now be furniſhed with proper bait, in order to induce them to repeat their viſits. No ſooner does one of theſe marauders plunge through the ſection of the parchment in the veſſel, than it retreats to the brick or ſtone, and commences its lamentations for relief. Nor are its whining notes uttered in vain; others ſoon follow, and ſhare the ſame fate, when a dreadful conflict begins among them, to decide the poſſeſſion of the dry aſylum. Battles follow in rapid ſucceſſion, attended with ſuch loud and noiſy ſhrieks, that all the rats in the neighborhood haſten to the fatal ſpot, where they experience ſimilar diſaſter. Thus hundreds may be caught by a ſtratagem, which might be greatly facilitated by expoſing in the caſk a living rat taken in a trap, or purchaſed from a profeſſional rat-catcher. In this way thoſe deſtructive vermin may be ſuddenly exterminated from a houſe or neighborhood at very little trouble or expenſe.

Domeſt. Encyc.

ARTICLE VIII.

GOLD diſcovered in North Carolina.

IN Cabarrus county, (N. C.) gold has been picked up in lumps and grains to the amount of many thouſand dollars. It was diſcovered in the bottom of Meadow Creek. This is a ſmall ſtream which falls into Rocky River, a principal branch of the Pedee. The firſt piece of this precious metal was found by a boy, in July, 1803, who was exerciſing himſelf by ſhooting ſmall fiſhes with a bow and arrow. The maſſes were of different ſizes, from very ſmall grains to the unexampled bulk

of a lump weighing a quarter of an avoirdupois hundred! which tranſcends by far the piece of native gold ſent from Mexico to Spain, for the royal cabinet, on account of its extraordinary ſize. This Carolinian ſpecimen of 28 *pounds*, on being melted and refined, loſt only fifteen per cent of its weight. The ſmaller ſamples loſt only from two to five per cent. Other pieces have been found of 4 and 5 pounds weight. From a report of the Director of the mint, it appears, that about *eleven thouſand dollars* of the gold coin, iſſued from the mint during the year 1804, was formed of this native gold of Cabarras county.

The face of the country in the neighborhood of this Pactolian water, is, for the moſt part, very uneven. The ſoil is barren and rocky. The ſtrata of the rock are nearly vertical; and their direction is from N. E. to S. W. like the other great ſtrata throughout the United States. In the interſtices and chinks between thoſe ſtrata of rock over which Meadow Creek runs, the pieces of gold are found, intermixed with ſand. Flint (quartz) and a blue colored rock (granite) are the prevailing kinds of rock hereabout. Another ſort of earthy matter is irregularly ſcattered around, which is perfectly black, and covered with a ſubſtance reſembling ſoot; as is alſo another kind of ſubſtance, which looks like a mixture of tar and ſand.

A ſpecimen of this gold, in the poſſeſſion of Dr. MITCHILL, is of a rich and beautiful yellow, blended with particles of quartz: except this addition, it ſeems to be remarkably malleable and pure.

As the larger lumps are now chiefly picked up, the people are engaged in waſhing and ſearching the ſand for ſmaller particles: and it is ſaid, that the quantity procured in this way, is very well worth the ſeeking.

Medical Repoſitory.

ARTICLE IX.

Of the Ages of different Trees—how determined.

THERE is a circumſtance attending the growth of trees, which ſerves to denote their age with great accuracy. The body of a tree does not increaſe by an univerſal expanſion of all its internal parts, but by additional coats of new wood; and theſe are formed every year, by the ſap which runs between the bark and the old wood. When a tree is cut down, this proceſs of nature becomes apparent in the number of parallel circles, or concentric rings, which ſpread from the

centre to the circumference of the tree. In many obſervations made by others, and by myſelf, upon trees whoſe ages were known, the number of theſe circles was found to agree exactly with the age of the tree. By this method of computation, I have always found the pine to be the moſt aged tree of the foreſt, ſeveral of which were between three hundred and fifty and four hundred years of age. The largeſt trees of other ſpecies, are generally between two and three hundred years. In the more advanced periods of vegetable life, this method of computation often fails; the decays of nature generally begin in the central, which are the moſt aged parts. From them the mortification gradually extends to others; and thus the internal parts of the tree die in the ſame order in which they were produced; the progreſs of death regularly and ſteadily following the ſame order and courſe, which had been obſerved in the progreſs of life. In this ſtate of a tree, no computation can be made of its age; but it ſeems moſt probable, that the time of its natural increaſe and decreaſe, are nearly the ſame; and that the natural period of vegetable life is double to that, which the tree has attained, when it firſt begins to decay at the heart.

Dr. Williams's Hiſtory of Vermont.

ARTICLE X.

A Bill of Mortality in Shrewſbury, for the Year 1805; *communicated in a Letter by the Rev.* JOSEPH SUMNER, *dated February* 23, 1806.

SHREWSBURY, according to the laſt cenſus, contains 1058 inhabitants. The whole number of deaths for the laſt year (1805) were 19, *viz.*

	Complaints.	*No.*	*Age.*
In February.	Pleuriſy	1	60
	Typh. fever	1	83
	Palſy	1	75
	Unknown	1	Inf.
March.	Phagedæna	1	39
	Convulſions	1	Inf.
	*Ang. Maligna	2	3 & 2
April.	Ang. Maligna	1	3
May.	†Hepatitis	1	62
July.	Epilepſy	1	71
	Convulſions	1	Inf.
Auguſt.	Conſumption	1	22
September.	Conſumption	1	27
October.	Typh. fever	1	3
	Mortification	1	77
	Apoplectic	1	81
	Palſy	1	86
December.	Hydroc. Int.	1	2

From the year 1762 to 1802, the deaths were 491; being upon an average between 12 and 13 in a year: the births were more than twice that number. When the cenſus was taken in the year 1790, there was about one in fifty of the inhabitants, more than 80 years of age.

* Malignant ſore throat. † Inflammation of the liver.

ARTICLE XI.

Result of Meteorological and other Observations, for February, 1806; *made at* PORTSMOUTH, (N. H.) *by Mr.* CHARLES PEIRCE; *at* MASON *and* CONCORD, *as in our last Number; and at* BOSTON:—*For the Medical and Agricultural Register.*

February, 1806.	*Mean degs. at sun-rise.*	*Mean degs. at 2 P. M.*	*Mean deg. of the mo.*	*Greatest heat in the month.*	*Least heat in the month.*	*Prevailing winds.*	*Marriages.*	*Births.*	*Deaths.*
Portsmouth	26 3/4	39 6/7	31 1/2	20th day 53°	6th day 10°	W. & N. W.			
Mason	28 11/14	36 2/3	32 3/4	20 57	6 9	W. & N. W.	—	—	1
Concord	21 1/2	35	30	20 54	14 0	N. W.	2	4	3
Boston	27 0/4	38 1/6	32 1/2	20 59	6 11	W. & N. W.			

WEATHER.

Portsmouth.	*Inc.*	*Mason.*	*Inc.*	*Concord.*	*Inc.*	*Boston.*
1*st d.* snow mod.		snow, S. E.	1	snow, sleet, N.E.		spitting of sn. N.E.
3— vio. sn. stor. 9 A.M.	3	sn. 8 A.M. N.E.	10	sn. 8 A.M. N.E.	8 1/2	snow, 9 A.M. N.E.
7— flying clouds		snow, 2 P.M.	1	cloudy		cloudy
8— mixt. of sn. & rain		rainy		rain, foggy		rain, fair at evening
9— high winds		very high winds		snow, N. W.	3/4	snow squall, N.
10— lowering		cloudy, still, fair		fair, cloudy		fair, still, cloudy
11— snow, E.	1	cloudy, N.		cloudy, N.E&W.		cloudy, N.E.
12— sn. stor. P. M.	3	snow, 1 P.M.N.E.	5	snow at even. E.	3 1/4	snow at evening
15— thawey, some rain		evening, sprink. of rain		rain at sun-set		sprinkling of rain
18— mist of sn. & hail		frozen rain & sn.	1	snow, cloudy		rain at evening
20— remarkably warm; night, rain		night rain		general thaw		night, rain
27— mod. sn. stor.		fair		cloudy		sprinkling of rain
Tot.	7.	*ft.*	1 6.	*ft.*	1 0 1/2.	

Mason, 22d, snow mostly gone in open land. 23d, robins and other spring birds were seen.

Concord, 21st, Mr. ROLAND PARKER, son of Dr. PARKER of Harvard, passing through town, drowned; occasioned by sudden rise of the river.

ARTICLE XII.

Bills of Marriages, Births, and Deaths; communicated by Gentlemen of the Clergy in their respective Towns; for 1805.

Towns.	*Last Census.*	*Marriages.*	*Births.*	*Deaths.*
Southborough	871	—	28	6
Stoneham	380	3	11	14
Danvers (N. Parish)	——	4	—	15
Middleton	598	8	—	7
Townsend	1159	8	—	25
Pembroke (E. Par.)	——	8	—	7
Athol	993	7	50	12
Parkersfield	977	7	18	6

NOTES.

To the Editor of the Medical and Agricultural Regiſter.

SIR.....THE appearance of ſo uſeful a work as the *Regiſter* promiſes, muſt be a ſource of pleaſure to every perſon who has in view the happineſs and proſperity of his country. That it may meet with ſuch patronage as its uſefulneſs deſerves, is the ſincereſt wiſh of the writer. But the introduction of ſome appropriate pieces of Poetry, I think, would be an elegant improvement of the work. Dr. ARMSTRONG's celebrated "*Art of Preſerving Health*," combines both beauty of expreſſion and ſolidity of remark. That this truly uſeful poem may appear in the *Regiſter*, is the wiſh of one ſubſcriber, and will perhaps meet the approbation of many. A NEW HAMPSHIRE SUBSCRIBER.

"*THE introduction of ſome appropriate pieces of Poetry*" into the *Regiſter*, is a meaſure we had previouſly contemplated. Pains have already been taken to make a collection: ſome pieces hitherto unpubliſhed, are in expectation. In the mean time, we ſhall comply with the wiſhes of our correſpondent, and preſent ſome extracts from the poem called for, in our next number.

OUR readers in this number will find a conſiderable increaſe of original matter, and that of a moſt intereſting nature. A communication on the "*Natural Hiſtory of the Horſe-Bee*," another on the "*Angina Maligna, or Ulcerous Sore Throat*," are very thankfully received, and will appear in our next number.

THIS early attention of our correſpondents is highly gratifying to us, and, it is preſumed, will be equally ſo to our readers. We hope for an increaſe of theſe favors. It is our wiſh, ſo far as poſſible, that the *Regiſter*, in a great meaſure, ſhould be filled with original communications. This, however, it muſt be remembered, is a circumſtance not always to be controlled by any wiſhes or reſolutions of our own. As the huſbandman, having prepared his grouud, and ſown his ſeed, looketh unto Heaven for thoſe alternate rains and ſunſhines, which may cauſe it to ſpring up and proſper....ſo we, with much labor and conſiderable expenſe, having opened a ready and a convenient channel of communication, on ſubjects which reſpect the health and the agriculture of our country, our expectations now are unto the experienced, the obſerving, and the wiſe, for thoſe intelligent communications which ſhall cauſe it to proſper in our hands. There is a treaſure of obſervation in our country, continually accumulating with individuals, which being promulgated, makes not them "*the poorer*," but makes her "*richer indeed*."

To the Agents for the Regiſter.

OUR Agents who wiſh for any attention from us, in forwarding their bundles by the ſtages, mail, or otherwiſe, will give particular directions, (thoſe who have not done it,) which will always be carefully attended to.

CONDITIONS OF THE REGISTER.

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